



## **Company history**

### **History of LEM Group**

#### 2010

Paul Van Iseghem retires after more than 10 years with LEM, initially as a member of the Board of Directors and since 2005 as the CEO and President. Paul Van Iseghem has been leading the company successfully during an impressive phase of profitable growth and shareholder value creation. To note are the expansion in new markets, in particular in China, and in new applications like in renewable energies. The Board of Directors gratefully recognizes his outstanding achievements and the excellent performance of LEM throughout the years of his mandate.

Francois Gabella has been appointed the new CEO of LEM by the Board of Directors.

#### 2009

LEM acquires the Danish company Danfysik ACP (Advanced Current Products) A/S, the world's leading company in the development and manufacturing of highest precision current transducers for three main markets: medical scanners, precision industrial motor controls and test & measurement.

A new facility in Beijing China is opened featuring 10'000 m<sup>2</sup> of production and office space. Celebration of the 20 year anniversary of LEM in China.

#### 2008

After almost 10 years on the Board Fritz Fahrni decides to leave LEM for personal reasons.

Launch of the DV, the first compact DC, Class 1 accurate voltage transducer for the traction market.

Sales of CHF 203 million for the FY 2007/08 ending in March 2008.

#### 2007

Achieved the milestone of over CHF 203 million in Sales. Launch of new products for DC current measurement in renewable energies and batteries. LEM now employs over 1'000 employees world wide.

#### 2006

Sales growth of 22% to CHF 184 million. Successful launch of new products in the area of Energy and Automation: Sentinel – the most comprehensive transducer for Battery Management for supervision of standby batteries for critical applications and Wi-LEM, the first Wireless Local Energy Meter. The Minisens was also introduced which is the smallest fully fledged transducer the size of a chip. Ageeth Walti joins the team as the new CFO.

#### 2005

Successful sale of Instruments business to Danaher Corp closed on 23 June 2005  
Sale of the CTN real estate closed on 31 March, i.e. on the last day of the financial year. Paul Van Iseghem appointed CEO of LEM.



Following the divestments MCHF 29.4 was reimbursed to shareholders as capital reduction. All debt of MCHF 30 was reimbursed and the Group has a net cash position of MCHF 25. In November a new Business Plan for LEM's continuing operations was presented and approved.

CFO Kennerth Lundgren resigned after 13 years with company and after having strongly contributed to the transformation of LEM through the divestments. Strong share price performance.

#### 2004

Strategic audit with Arthur D. Little (ADL) initiated by the Board. In May it leads to the decision to divest LEM Instruments. Patrick De Bruyne is appointed project leader for the divestment. Sale and Purchase agreement signed on 23 December 2004.

Patrick De Bruyne, Robert Wyss and Michel Mattacchini, leave the Board. Patrick De Bruyne steps down from the position of CEO. Transition Management lead by Felix Bagdasarjanz, who took over as Chairman. Paul Van Iseghem appointed CEO of Continuing Operations. He introduced a new LEM organisation based on a matrix. Kennerth Lundgren remained CFO and was heavily involved in the real-estate and Instruments divestment projects. Anton Lauber joined the Board.

#### 2003

Philippe Vedel leaves as President of LEM Instruments. David North, who is with LEM since 1989 and who notably contributed to LEM's growth in Asia, is appointed as his successor.

Divestment of High Current System Business, LEM DynAmp in Columbus/Ohio by a Management Buy-out. New company is named DynAmp, LLC. This activity was too small and did not have a growth strategy.

Peter Rutishauser is elected Board member based on a request from the biggest shareholder Werner Weber.

#### 2002

Acquisition of the transducer business of HINODE Electric KK, in Tokyo, Japan. After a longterm partnership LEM acquires 65% of the shares of the Paris based company Universal Technic S.A. This supports LEM's overall offering of probes while acquiring valuable competencies in the development of current probes using AC transformer technology.

Felix Bagdasarjanz joined the LEM Board.

#### 2001

Signing of a joint product development agreement with SMF technologies plc, a technology transfer company in Limerick, Ireland.

LEM acquires 100% of the Belgium company Electronics Instruments International SA (EII) active in Digital Fault Recorders. This activity was never profitable inside LEM. The rest of LEM Instruments was profitable in the last years it belonged to LEM. Taking over of the minority interests of the joint venture ACTLEM SA in Belgium, created two years ago.

The President of LEM Instruments Ludger Grevenkamp was replaced by Philippe Vedel.



## 2000

Fritz Fahrni took over as chairman. President of LEM Components Pierre Strübin leaves and Paul Van Iseghem leaves the Board to take on an operational challenge in October 2000. New vertical business area organisation is established.

Kennerth Lundgren appointed as CFO and appointed as Chairman of the real-estate company CTN SA replacing Jean-Pierre Etter. LEM which was majority owner placed four LEM directors on the CTN board and started to drive a change process in order to divest the real-estate.

Joint Venture with the Japanese Company NANA Electronics K.K., bringing together with Nippon LEM and foundation of the common NANALEM K.K. Main activity:

Extension of Components business

First customer-tailored ASIC-based closed-loop transducers for the automobile industry

## 1999

Patrick De Bruyne approached Fritz Fahrni former CEO of Sulzer to join the LEM Board. Paul Van Iseghem joined the Board.

A further complementary acquisition in LEM Instruments was made to add new products. Joint Venture with the Belgian Company ACT'L SA and foundation of ACTLEM. Main activity: Systems for network analysis

LEM divests its Recorder business that it inherited with the NGI acquisition.

## 1998

The Chairman and founder Jean-Pierre Etter leaves the Board. Patrick De Bruyne takes on the double role of CEO and Chairman, the latter role ad interim.

In the restructurings following the acquisition of NGI, R&D spending had been cut. LEM Instruments needed new products so the acquisition of Dr. Werner Mühlegger F&E GmbH and Integration in LEM NORMA GmbH, helped to complement the product range with the Power Analysers TOPAS

Strong sales fluctuations between the years combined with a lack of growth strategy lead the Board to decide to divest its Power Semiconductor Test Systems business unit through an MBO into the independent LEMSYS company.

## 1997

25th Anniversary of LEM Group

Foundation of Centre de Technologies Nouvelles (CTN) SA with capital of MCHF 50.

Foundation of LEM Nederland BV

Introduction of state-of-the art multifunction Clamp-on Multimeter ANALYST 2050 and first ASIC based closed loop transducer (LTS series) was launched.

Breakthrough at 100 MCHF consolidated sales

Franco Mariotti, HP Manager, who had been a very appreciated Board member of LEM for a few years, died.

## 1996

New LEM matrix organisation: 2 Business Areas (BA), Components, Instruments, 2 Business Units (BU), Test Systems, High Current Systems. Three regions: Europe, Americas and Asia. Introduction of high accuracy closed loop transducers (IT Series) President of LEM Instruments Walter Hecke, who came with the NGI acquisition is replaced by Ludger Grevenkamp who had worked at German instruments competitor GossenMetrawatt.



### 1995

In Spring 1995 a Flemings Securities, London study was published which made a buy recommendation on LEM. Share price rose to record levels and fell strongly six months later when the results did not follow.

A few months later in July LEM announced the acquisition of NGI NORMA GOERZ Instruments in Wiener Neudorf/Austria.

Product range: Digital Multimeters, Safety Testers, Recorders, Power Analysers.

The company was in receivership and restructuring followed.

Pierre Strübin is appointed President of LEM Components.

### 1993

After having established the mission and vision for LEM in 1991 it was clear that the Instruments activity in LEM HEME was too small. LEM was approached for the acquisition of ELMES-Staub AG/Switzerland.

Product range: Network Analysers and Software.

Strong need in software development and sales mainly concentrated to Germany and Switzerland.

The LEM Group reached 50 MCHF consolidated sales

### 1992

Kennerth Lundgren joined as young controller to build up reporting and finance & accounting function at LEM.

In the late 80's LEM had developed high current systems and the only competitor in the world was a US manufacturer Halmar. In order to avoid a price war in a small market the high-current measurement activity from the American manufacturer Halmar was taken over, giving birth to the LEM DynAmp Columbus/Ohio

### 1991

Multifunction Clamp-on Multimeter ANALYST 2000.

First orders of test equipment for Japan

### 1990

Formation of the Russian joint venture company TVELEM

City of Geneva Award for industry. High accuracy new "C" transducers

### Late 80's/early 90's

LEM realized that to serve its customers spread out in the world it was important to follow them where they are. Therefore, within two years LEM went international in the late 80's. In Japan, Germany, France and Sweden LEM opened its own subsidiaries. In the UK LEM bought LEM HEME which was a competitor for transducers with the so called "open loop" technology. It also had an instruments activity. In Russia and China, LEM started joint-ventures with local partners. In the USA LEM made acquisitions of electronic subcontractors but this did not work so in 1991 LEM started its own sales subsidiary.

The founder Jean-Pierre Etter realized that he could not manage this phase himself and asked Patrick De Bruyne, whom he knew from ABB, to join LEM. This was in 1989 and Patrick took over the operational management of LEM. He was the CEO and a Board member from 1993 to 2004. The challenge of LEM around 1990 was to



master the internationalisation, develop a strategy and to professionalise the operations with ISO quality assurance etc.

Patrick De Bruyne and David North, who came with the HEME acquisition, started to work on the strategy. The thought a concentration only on transducers would be too narrow and defined LEM's mission to be the measurement of electrical parameters with components, instruments and systems.

At this time LEM had components (transducers), systems (high current systems and test systems) and instruments (handheld instruments from the HEME acquisition). The biggest shareholder SBC Equity Partners was represented on the LEM Board by a local Geneva SBC credit manager. This shareholder remained until the SBC/UBS merger.

#### 1989

Increase of the share capital to MCHF 30 mainly to finance the real-estate project CTN. Not all shares were subscribed. SBC (Swiss Bank Corporation) Equity Partners in Basle had to take on quite some shares and where the biggest shareholder. Purchase of 80% British company HEME International Ltd. (HEME = Hall Effect Measurement Equipment), which previously belonged to Pilkington. Entry into the instruments market. Formation of the Chinese joint venture company Beijing LEM "Service Unit" test equipment for the maintenance of Power Electronics. Clamp-on Multimeter H600.

#### 1988

LEM SA moves into the CTN.  
Formation of the Japanese subsidiary Nippon LEM KK  
Reached 20 MCHF level of consolidated sales

#### 1987

Formation of the North American subsidiary LEM USA Inc,  
of the German subsidiary LEM Deutschland GmbH  
and of the Swedish subsidiary LEM Scandinavian AB.  
Introduction on the robotics market of the LA 50-P transducer.  
Delivery of the first test equipment for GTO's (GTO = Gate-Turn off-thyristor)

#### 1986

City of Geneva Award for industrial Merit

#### 1985/86

Start of the building of the CTN real-estate complex (New Technology Centre).  
Listing of LEM on the Geneva stock-exchange.

#### 1985

Introduction of high current transducers of several 10 kA for plasma research

#### 1983

Formation of LEM Holding SA with a capital of 6.2 MCHF.

#### 1982

Formation of LEM France SARL.

#### Early 80's



Power electronics entered into industrial markets. LEM was still a handy craft operation and served its worldwide customers out of Geneva.

#### 70's

Power electronics was born and made inroads into traction markets, which was the driver behind LEM's growth.

LEM had two activities: transducers and test equipment for power semiconductors. The latter activity was profitable and what later became LEM's core business lost money in the beginning.

#### 1973

The first 300 A current transducers is integrated into the concept of the Swiss trolley buses.

#### 1972

Foundation of Liaisons Electroniques-Mecaniques LEM SA with a capital of 200,000 CHF, 17 shareholders in February 1972. The founder was Jean-Pierre Etter. He, his brother and a few friends built the first transducer (French: capteur; German: Stromwandler) in a kitchen in Carouge, a Geneva suburb.